



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/782,708 02/17/2004		Stephane Menard	TJK/450	5556	
27717	7590	03/08/2005		EXAMINER	
SEYFART	H SHAW	I	NGUYEN, HOANG M		
55 EAST M	ONROE S	STREET			
SUITE 4200)		ART UNIT	PAPER NUMBER	
CHICAGO,	IL 6060	3-5803	3748		
			DATE MAIL ED. 02/09/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

<	8	li
	v	•

	Application No.	Applicant(s)						
	10/782,708	MENARD ET AL.						
Office Action Summary	Examiner	Art Unit						
	Hoang M Nguyen	3748						
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1) Responsive to communication(s) filed on								
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.							
	/							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4)⊠ Claim(s) <u>1-57</u> is/are pending in the application.								
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6) Claim(s) <u>1-57</u> is/are rejected.	∂)⊠ Claim(s) <u>1-57</u> is/are rejected.							
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/or	election requirement.							
Application Papers								
9) The specification is objected to by the Examiner.								
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.						
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No.								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)								
1) \(\sqrt{1}\) \(\sqrt{1}\) \(\sqrt{1}\) \(\sqrt{2}\) \(\sqrt{2}\) \(\sqrt{1}\) \(\sqrt{2}\)	4) 🔲 Interview Summary Paper No(s)/Mail Da							
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/17/04	5) Notice of Informal Page 1975 Other:	atent Application (PTO-152)						

Application/Control Number: 10/782,708

Art Unit: 3748

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 13-15, 21, 26, 27, 33, 52, 54, are rejected under 35 U.S.C. 102(b) as being anticipated by US 6407478 (Wood et al).

Wood et al disclose a MEMS actuator comprising a cold bar 114, spaced apart hot bars 116, 118, each having an anchor pad 122, 124, 126, a substrate, dielectric tether 128 connected the free ends of said bars. Figures 13-17 disclose the concept of using many MEMS actuators for actuating switches.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-12, 16-20, 22-25, 28-32, 34-51, 53, 33-37, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6407478 (Wood et al). Wood et al discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose different types of materials of the dielectric tether, many dielectric tethers mounted along the bars, and many switching configurations. However, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to select different types of materials, providing many dielectric tethers and providing

Art Unit: 3748

different switching configurations in Wood et al for the purpose of achieving appropriate work outputs.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hanson et al, Ellis, Kolesar, and Weaver et al disclose MEMS actuators comprising cold bar and spaced apart hot bars.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion, can be reached on (571)-272-4859. The fax phone number for the Examiner is (703) 872-9302 for regular communication, and (703) 872-9303 for after final communication.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-3700.

HOANG NGUYEN PRIMARY EXAMINER ART UNIT 3748

Hoang Minh Nguyen 3/3/05